

DETAILED ACTION

Election/Restrictions

1. Claims 1-20 and 27-29 directed to an allowable product. Pursuant to the procedures set forth in MPEP § 821.04(B), claims **21-23**, directed to the process of making or using an allowable product, previously withdrawn from consideration as a result of a restriction requirement, are hereby rejoined and fully examined for patentability under 37 CFR 1.104.

Because all claims previously withdrawn from consideration under 37 CFR 1.142 have been rejoined, **the restriction requirement as set forth in the Office action mailed on 9/18/2009 is hereby withdrawn.** In view of the withdrawal of the restriction requirement as to the rejoined inventions, applicant(s) are advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once the restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with A. Pezzner on 6/8/2010.

The application has been amended as follows:

In Claim 1, lines 8-10, **delete** "characterised in that solvent A is a good solvent for the organic semiconductor, solvent B is a good solvent for the organic semiconductor, solvent C is a poor solvent for the organic semiconductor and".

In Claim 4, line 1, **delete** "characterised in that" and **replace** with --wherein--.

In Claim 5, line 1, **delete** "characterised in that" and **replace** with --wherein--.

In Claim 6, line 1, **delete** "characterised in that" and **replace** with --wherein the solution additionally comprises--.

In Claim 7, line 1, **delete** "characterised in that" and **replace** with --wherein--.

In Claim 8, lines 1-2, **delete** "characterised in that the polymeric organic semiconductors employed are" and **replace** with --wherein the high molecular weight organic semiconductors are selected from the group consisting of--.

In Claim 8, line 3, **delete** "or -biphenylenes," and **replace** with --poly-para-biphenylenes,--.

In Claim 8, line 7, **delete** "and/or" and **replace** with --and-
-.

In Claim 8, line 8, **after** "solvents" **add** --and mixtures thereof--.

In Claim 9, **delete lines 1-3** and **replace** with --Solutions according to Claim 6, wherein the organic non-conductors are matrix polymers selected from the group consisting of low-molecular-weight, oligomeric, dendritic, or polymeric organic and organometallic semiconductors and mixtures thereof.--

Art Unit: 1796

In Claims 10-15, line 1, **delete** "characterised in that" and **replace** with --wherein--.

In Claim 16, **delete** "characterised in that other good and/or poor solvents are used in addition to solvents A,B, and C." and **replace** with --wherein the solution comprises additional solvents.--

In Claim 17, line 1 **delete** "characterised in that" and **replace** with --wherein--.

In Claim 17, line 2, **delete** "and/or" and **replace** with --and--.

In Claim 17, line 2, **after** "used" **add** --are selected from the group consisting of--.

In Claim 18, line 1 **delete** "characterised in that" and **replace** with --wherein--.

In Claim 18, line 2, **delete** "and/or" and **replace** with --and--.

In Claim 18, line 2, **after** "from" **add** --the group consisting of--.

In Claim 18, line 17, **delete** "or" and **replace** with --and--.

In Claim 19, **delete** lines 1-6 and **replace** with "Solutions according to claim 1, wherein the solvent C is selected from the group consisting of straight chain, branched or cyclic alkanes, terpenes, (cyclo)aliphatic alcohols, ketones, carboxylic acid esters, mono- or polysubstituted aromatic solvents which have substituents selected from the group consisting of alkyl substituents having 4 or more C atoms, alkoxy substituents having 4 or more C atoms, alcohols having more than 4 C atoms, glycols and ethers.--

In Claim 20, lines 1-2, **delete** "characterised in that at least one solvent C is selected from" and **replace** with --wherein solvent C is selected from the group consisting of--.

In Claim 20, line 9, **delete** "or" and **replace** with --and--.

In Claim 27, **delete** lines 1-5 and **replace** with --wherein solvent C is selected from the group consisting of straight

Art Unit: 1796

chain, branched or cyclic alkanes having seven or more C atoms, terpenes, (cyclo)aliphatic alcohols, ketones, carboxylic acid esters, mono- or polysubstituted aromatic solvents which have substituents selected from the group consisting of alkyl substituents having 4 or more C atoms, alkoxy substituents having 4 or more C atoms, alcohols having more than 4 C atoms, glycols and ethers.--

Cancel Claims 24-26.

In the Specification, pg. 6, line 8, **insert**

--Brief Description of the Drawings

Figure 1 shows the photography of structured pixels under UV-irradiation (356 nm). The pixels are obtained via InkJet printing in that inventive solution 6 was printed into a structured substrate.

Figure 2 shows the height profile of such a printed pixel. The height profile is measured in that the intensity of the photoluminescence (PL) is determined. The height profile shows the size of the pixel (given in micrometer on the X axis).--

EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance:

3. Bae et al. (US Patent App. Pub. No. 2003/0127977) teaches forming an emissive layer using a polymer dispersed in a solvent wherein the solvent is comprised of three distinct chemicals. As Applicants note in their Remarks, however, some of the components in the Markush groups of solvents disclosed in the prior art do not meet the boiling point limitations of the instant claims and it would not have been obvious to one of ordinary skill in the art to select components that meet the claimed limitations over those which do not. Spreitzer et al. (US Patent App. Pub. No. 2004/0225056) also teaches mixtures of solvents, including an embodiment contemplating three solvents, to solubilize organic semiconducting compounds, however, there is no suggestion of selecting solvents based on specific solubility requirements and it would not have been obvious to one of ordinary skill to select the solubility limitations as required by Claim 1. The Examiner notes the interpretation of the claim as requiring at least three distinct solvents per the limitations drawn to the differing boiling points and vapor pressures, especially in regards to solvents A and B.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaison P. Thomas whose telephone number is (571) 272-8917. The examiner can normally be reached on Mon-Fri 9:30 am to 6:00 pm.

5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system,

Art Unit: 1796

see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. P. T./
Examiner, Art Unit 1796

/Mark Kopec/
Primary Examiner, Art Unit
1796